60-215.2

18 JAN 1960

Mr. Gordon A. Speedie

STAT [redacted]

Dear Mr. Speedie:

In reply to your letter of January 9 which you forwarded pursuant to our telephone conversation about the "Time Flow Theory" of Dr. Nikolai A. Kosyrev, I am enclosing a photographic copy of an article which appeared in the Moscow News of August 23, 1959. You will note that this article reports rather fully on Dr. Kosyrev's theory and this is the only item I happened to have available concerning this work. In addition, however, I have located two items which were written in opposition to Dr. Kosyrev's theories. One of those is a report of a Moscow radio broadcast of November 18, 1959, and the other appeared in Pravda on November 22, 1959. I am enclosing copies of both since they may be of interest to you.

We have now made available to various components of our organization the material which you so kindly furnished our STAT [redacted] representative, and your data has been read with interest by several of our specialists. However, it is the consensus of their opinion that there is no practical application which can be made of your theories insofar as our work here is concerned.

Once again, many thanks for your thoughtfulness in bringing your work to our attention.

Sincerely,

[redacted]

STAT [redacted]

Assistant to the Director

Enclosures:

STAT O/DCI/[redacted] rad 14 Jan 60

Distribution:
Orig - Addressee w/encls
1 - JSE
1 - FMC
1 - EX w/basic
1 - 00/Contacts

GORDON ALEXANDER SPEEDIE

STAT

January 9, 1960

STAT

Office of Mr. Allen Dulles
Central Intelligence Agency
Washington 25, D.C.

STAT Dear

The theory mentioned by telephone was described in a newspaper article of early December, 1959, as a "Time Flow Theory", by Dr. Nikolai A. Kosyrev, of Russia. It was of such importance that the Soviet Academy of Science had a 4-day conference on the theory last March.

To save effort by those who would translate the theory from Russian to English, the key subject matter to watch for would be whether or not the theory applies equally to physiological phenomenon, and in particular, the cardiac cell, as well as other physical fields.

If this information is available, I shall give you the benefit of any comments it evokes, after I see it.

Very truly yours,

Gordon A. Speedie

GAS:mmp

Reprinted from MAIN CURRENTS in Modern Thought, November 1959

Speed Words

IN the Fall 1959 quarterly issue of *American Documentation,* Gordon Alexander Speedie has written an article on "Speed Words," in which he suggests that the flow of information through the printed word may be analyzed in much the same way as the flow of electricity. He makes an analogy between the dialectic field wherein ideas produce psychomotive force and the magnetic field wherein electromotive force is transmitted. The article is intended to formulate a conjecture which might be the subject of investigation.

The author defines a speed word as one which produces understanding in the least possible time. He intends, by this term, something more than the commonplace idea that short words invoke meaning more quickly than long ones. He rather proposes to discover the pattern of understanding which different words produce, by scientific analogy and experiment. Using the term "meaning time" to signify the rate at which words convey understanding, the author aims to introduce the time dimension. By recognizing common terms "for both systems, the potential of electromotive force called volt . . . could be one form of a common force called meaning, expressed in a short time interval. . . . In the dialectic system, psychomotive force, called meaning time, could be another form of the same force of meaning, expressed in longer time intervals. In this form it might be described as thought force or emoticity."

Mr. Speedie compares the flow of current to the flow of thought, and discusses the resistance encountered in both systems. He seeks to express the relationships in the dialectic field mathematically, basing his method upon analogy. The laws of an electric system work when in a circuit; the dialectic system may depend upon parallel laws, if terms are rightly selected. Thus, in the electric field, 1. amperes (flow of current) equal volts ("meaning time") divided by resistance; and 2. watts output (power consumed) equals volts ("meaning time") multiplied by amperes (flow of current). In the dialectic field this can be transformed as follows: 1. word frequency (flow of thought) equals "meaning time" divided by the resistance of the circuit (audience experience) and 2. word speed (thought consumed-understanding) equals "meaning time" multiplied by word frequency (flow of thought). In this case, word frequency is defined as the number of occurrences of a word per million words used by a stated audience, the average time per word for a million words being the equivalent of a time value. "Meaning time" is the actual time interval since a new form of meaning for a word began. Audience resistance uses the individual as a unit; one person using a word once a year has a resistance of one; twice a year, one-half, and so on.

Using these terms as factors, Mr. Speedie measures the speed of words with the equation:

$$WS = MT \times WF$$

where WS is the relative speed of a word in terms of its understandibility, MT is the meaning time in years of word use, and WF is the word frequency per million words used by a stated audience. (For the latter figure, the author cites as reference the indexes in *The Teachers Word Book,* by Thorndike and Lorge.)

Use of this method experimentally has brought Mr. Speedie to several conclusions: Certain words, such as father and water, are basically the same in many languages; the same thing is true of numbers. Also, as W. L. White has pointed out, changes which take place during the history of a language are regular and consistent enough to permit comparisons so that the earlier stages of language may be reconstructed. Obviously, variations in word speed, as well as other factors, suggest that all meaning is relative, and that the most lasting expression of relative meaning would be basic family words, and numbers. From this it would appear that "there may be as much meaning in a few dozen stable words, of greater meaning age than numbers, as there is in the numerical relationships of a few dozen digits in the decimal system," which supply the basis of the universal language of science, mathematics. In this way, the relative importance of many languages could be assessed, and the changing form of an even more basic or universal language might be revealed.

Obviously, a study of this kind has implications so far as communication and motivational research are concerned. Additional experiments may lead to a recognition that motivations hidden in the changing use of words are automated. As for communication, no matter how large and supple a vocabulary a writer may possess, he can communicate no better picture of his subject than his audience can understand. A scientific analysis of word speed could assist such a writer in choosing language whereby his audience would grasp his essential ideas most rapidly, yet it would allow him to retain his own style through flexibility of phrasing and imagery. At the same time, speed words might help to solve interdisciplinary problems, since they could lead to a more general acceptance of word usage to express scientific knowledge.

If the analogy can be pressed home, the author suggests, speed words would necessarily prove to be only part of a larger concept. This is that there may well be another non-material field which exerts governance upon action—a field of thought, above and yet related to known fields such as gravity, magnetism and electrostatics. If such a field were postulated and searched for a field constant and field units, language could, in a mean sense, become a field constant, and the relationship of ideas field units. —*S. J Aylner*

RELEASE

EDUCATIONAL RESEARCH CORP
10 Craigie St., Cambridge, Mass.
UNiversity 4-2400
or
GORDON SPEEDIE

STAT

COMPUTERS TO SERVE AGENCIES

Advertisers, agencies and publishers may use computer studies of audience receptivity and word speeds, as a result of arrangements made this week between Educational Research Corporation, Cambridge, Mass. (where computer technicians are trained), and Gordon Speedie, Advertising and Research Consultant, Medford, Mass.

An article on "Speed Words" by Mr. Speedie, presenting this computer technique, and describing a "copy mechanic" is to appear in the January issue of AMERICAN DOCUMENTATION. Applied to advertising, computers can objectively analyze: 1) The most read editorial material and advertising copy, to detect words and phrases coming into or going out of use, and make these data useful to writers. 2) Word speeds to detect words best understood by particular audiences. 3) Book contents to detect areas of common words and common phrases, so editors can reduce word quantity and improve thought quality to speed communication of new information.

P.J. Rulon, Director of E.R.C., in releasing news of the arrangement, said, "High speed computers now make such research practical and imperative. E.R.C. plans emphasis on pilot projects where teachable new techniques can be explored and developed. This can make syndicated computer services available to many small agencies, as well as special services available to large agencies."

- End -